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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,589	09/22/2005	Steffen Schule	PS/E 200020US01	9122
27885	7590	08/19/2010		
FAY SHARPE LLP 1228 Euclid Avenue, 5th Floor The Halle Building Cleveland, OH 44115			EXAMINER SAYALA, CHHAYA D	
			ART UNIT	PAPER NUMBER
			1781	
			MAIL DATE	DELIVERY MODE
			08/19/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/527,589

Applicant(s)

SCHULE ET AL.

Examiner

C. SAYALA

Art Unit

1781

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 4, "substantially" is of indeterminate scope. In line 4, "substantially" is indefinite unless defined in the specification because what is considered 'substantial' is unascertainable. Also, "reduced microbial burden" is indefinite. This phrase begs the question as to what is the microbial reduced from. The specification does not provide any more clarity. Is applicant referring to the microbes of the rumen?

"Majority" is indefinite. The specification does not give any definition to what amount this stands for. Is majority referring to over 50%? Clarification is required to assess whether there is a question of new matter.

In claim 1, line 6, "adapted" is a process step and is not defined as to how it was adapted. Although this is a product claim, applicant has used a product-by-process format and the usage of "adapted" without more as to how it was adapted raises indefiniteness of the claims. Furthermore, clarification is required as to how it was adapted so as to determine if the specification has adequately provided written description of such adaptation.

In claim 2, applicant claims an increased swelling capacity wherein the swelling capacity measurement to observe the "majority" of the swelling is carried out within the stomach. In line 4, the use of two articles should be corrected (i.e. "the" and "a")

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 102/ Claim Rejections - 35 USC § 103

2. Claims 1-2 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 612562.

With regard to claim 1, drawn to a crude fiber concentrate of fibrillated lignocellulose, the EP patent teaches fibrillated lignocellulose. See col. 3, lines 27-28, 53-54, col. 4, lines 20-21 and claim 1. The instant claims include intended use language and

properties of the additive, such as limiting food intake during ad libitum feeding, both of which do not lend patentability to an old and known product. See *In re Spada*, 15 USPQ 2d, 1655: The discovery of a new property or use of a previously known composition, even when that property and use are unobvious from the prior art, cannot impart patentability to claims to the known composition. Applicant has claimed a concentrate of fibrillated lignocellulose and then includes limitations of use and properties. With regard to the limitations that describe the product's properties, these properties must be inherent. Furthermore, the Office does not have the resources to prepare and obtain such fibers and perform a Weender analysis or even observe the swelling capacity within the stomach of the animal. That burden is being shifted to applicant, to show that the product is different and that patentability can be established thus.

The MPEP states at § 2112 that: Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977). This same rationale should also apply to product, apparatus, and process claims claimed in terms of function, property or characteristic. Therefore, a 35 U.S.C. 102/103 rejection is appropriate for these types of claims as well as for composition claims. Also at MPEP § 2112:

"[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

With regard to claims 2 and 11, applicant has chosen to describe his product with more physical properties that the Office does not have the resources to measure with respect to prior art products, and make comparisons therewith, and therefore, that burden is being shifted to applicant to establish that the product is different. Since the EP patent also discloses fibrillated cellulose, then the properties recited in these claims must be inherent.

3. Claims 1-4, 6-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over FR 2627668.

The FR patent teaches a lignocellulose material that has been compacted to pellets to be used as an animal feed additive. See the two abstracts supplied. Also see the last page of the translation at the first two paragraphs. The patent teaches that after processing the lignocellulose, the final product is a porous fibrous material. See page 1, last full paragraph. Claim 1 limitations of use do not establish patentability of an old and known product because these limitations are directed to intended use. Claims 2 and

11 that recite properties of an old and known product do not distinguish the product because such properties would be inherent to the product. The instant claims include intended use language and properties of the additive, such as limiting food intake during ad libitum feeding, both of which do not lend patentability to an old and known product. See *In re Spada*, 15 USPQ 2d, 1655: The discovery of a new property or use of a previously known composition, even when that property and use are unobvious from the prior art, cannot impart patentability to claims to the known composition. Applicant has claimed a concentrate of fibrillated lignocellulose and then includes limitations of use and properties. With regard to the limitations that describe the product's properties, the EP patent shows the lignocellulose fibers to be insoluble, and the remaining properties must be inherent. Furthermore, the Office does not have the resources to prepare and obtain such fibers and perform a Weender analysis or even observe the swelling capacity within the stomach of the animal. That burden is being shifted to applicant, to show that the product is different and that patentability can be established thus.

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4. Claims 1-4, 6-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 95/05087.

The WO patent teaches lignocellulosic fibers whose particle size has been reduced, that can be pelletized and is intended as an animal feed additive. See page 6, lines 25-27, page 7, lines 1-4, page 13, lines 7-10, 25-30, page 14, lines 1-2. The WO patent teaches pelletizing lignocellulose fibers. See page 14, lines 21-22. Note that the claims teach the animal feed. Claims 2 and 11 that recite properties of an old and known product do not distinguish the product because such properties would be inherent to the product. . The instant claims include intended use language and properties of the additive, such as limiting food intake during ad libitum feeding, both of which do not lend patentability to an old and known product. See *In re Spada*, 15 USPQ 2d, 1655: The discovery of a new property or use of a previously known composition, even when that

property and use are unobvious from the prior art, cannot impart patentability to claims to the known composition. Applicant has claimed a concentrate of fibrillated lignocellulose and then includes limitations of use and properties. With regard to the limitations that describe the product's properties, the EP patent shows the lignocellulose fibers to be insoluble, and the remaining properties must be inherent. Furthermore, the Office does not have the resources to prepare and obtain such fibers and perform a Weender analysis or even observe the swelling capacity within the stomach of the animal. That burden is being shifted to applicant, to show that the product is different and that patentability can be established thus.

The MPEP states at § 2112 that: Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977). This same rationale should also apply to product, apparatus, and process claims claimed in terms of function, property or characteristic. Therefore, a 35 U.S.C. 102/ 103 rejection is appropriate for these types of claims as well as for composition claims. Also at MPEP § 2112:

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1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

5. Claims 1-4, 7-9, 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tyson (US Patent 5705216).

Tyson teaches a ruminant feed which includes lignocellulose that is in the form of hydrophobic fibers. Figure 1, which is one of the two embodiments of the patent, exemplifies a method which includes a fibrillator which clearly shows that fibrils or fibers were formed. See also col. 3, lines 56-58, col. 5, lines 50-55. Col. 7, lines 15-20 and col. 11, line 63 show compacting. Col. 11, lines 28-35, 40-45 shows fibrillation to produce hydrophobic fibers. Claims 2 and 11 that recite properties of an old and known product do not distinguish the product because such properties would be inherent to the product. . The instant claims include intended use language and properties of the additive, such as limiting food intake during ad libitum feeding, both of which do not lend patentability to an old and known product. See *In re Spada*, 15 USPQ 2d, 1655: The discovery of a new property or use of a previously known composition, even when that property and use are unobvious from the prior art, cannot impart patentability to claims to the known composition. Applicant has claimed a concentrate of fibrillated

lignocellulose and then includes limitations of use and properties. With regard to the limitations that describe the product's properties, the EP patent shows the lignocellulose fibers to be insoluble, and the remaining properties must be inherent. Furthermore, the Office does not have the resources to prepare and obtain such fibers and perform a Weender analysis or even observe the swelling capacity within the stomach of the animal. That burden is being shifted to applicant, to show that the product is different and that patentability can be established thus.

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necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

5. Claims 1-4, 7-9, 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bender (US Patent 4136207).

Bender is drawn to animal feeds that include lignocellulose that is mechanically compacted (abstract) and col. 4, lines 3+ shows fibrillation. Claims 2 and 11 that recite properties of an old and known product do not distinguish the product because such properties would be inherent to the product. The instant claims include intended use language and properties of the additive, such as limiting food intake during ad libitum feeding, both of which do not lend patentability to an old and known product. See *In re Spada*, 15 USPQ 2d, 1655: The discovery of a new property or use of a previously known composition, even when that property and use are unobvious from the prior art, cannot impart patentability to claims to the known composition. Applicant has claimed a concentrate of fibrillated lignocellulose and then includes limitations of use and properties. With regard to the limitations that describe the product's properties, the EP patent shows the lignocellulose fibers to be insoluble, and the remaining properties must be inherent. Furthermore, the Office does not have the resources to prepare and obtain such fibers and perform a Weender analysis or even observe the swelling

capacity within the stomach of the animal. That burden is being shifted to applicant, to show that the product is different and that patentability can be established thus.

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6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2627668 or WO 95/05087 or Tyson or Bender in view of Schroeder et al. (US Patent 4431675) and Markussen et al. (US Patent 4106991).

The primary references teach lignocellulose fibers as animal feed additives but fail to disclose the amounts claimed. Schroeder et al teach cellulose amounts in animal feed at Table 1 as up to 2.5% and Markussen teach finely divided cellulose fibers in an amount 2-40%. To fathom the proper amounts of fiber based on such disclosures would have been prima facie obvious, both of which show amounts that include the range claimed instantly based on the additive.

Response to Arguments

Applicant's arguments filed 7/22/2010 have been fully considered but they are not persuasive.

Applicant states that the EP Patent shows the lignocellulose to be oil sorbent but not water absorbent. This is based on applicant's claim of the product's water sorption capacity. However, these are properties that the Office cannot measure and the claims are to a product, not its properties. Since the Office cannot prepare prior art products for comparison purposes, it falls upon applicant to establish that the prior art products have properties that are different and the instant product is patentably distinguished. Applicant has failed to do so, and merely arguing that the properties are different or merely describing the product's different uses or properties does not make the product patentable. With regard to the fiber content of the feed, the National Research Council

has established nutrient guidelines for each and every animal and by basing such information and the amounts given in the applied references, it would require no more than ordinary skill in the art to determine fiber quantities as required. Applicant's range itself shows a wide margin and the need to fathom amounts for various animals. That the references show a different method of stating amounts of fiber and not in the same terms that applicant has recited, (i.e. based on the food and not based on the granulate), does not take away the ability of the person of ordinary skill in the art to fathom amounts of fiber required for each animal based on NRC requirements. With regard to Schroeder, applicant's position that the animal feed block serves as a supplement is disagreed with because it is well known that these blocks are also provided as free choice or self-feeding for ruminants.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Sayala, whose telephone number is (571) 272-1405. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/C. SAYALA/
Primary Examiner, Art Unit 1781**